



ABSTRACT

The present invention provides a method for modulating expression of a genetic sequence by introducing, creating or deleting one or more pseudo-translation initiation sites in the nucleotide sequence of an mRNA, upstream of the authentic translation initiation site of an open reading frame. Expression of the genetic sequence can be further modulated by introducing, creating or removing Kozac or Kozac-like sequences proximal to the pseudo-translation initiation site(s). Moreover, expression can be manipulated by the introduction, creation or removal of a termination signal prior to the authentic translation initiation site or after this site but in a different reading frame relative to the reading frame determined by the authentic translation initiation site. Nucleic acid molecules useful for practicing the present methods are also provided. The present invention further provides a method for detecting a disease condition associated with a particular level of expression of a gene or other genetic sequence.